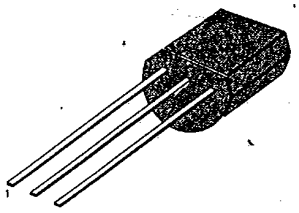
MPS6602 NPN EPITAXIAL SILICON TRANSISTOR

T-29-21

AMPLIFIER TRANSISTOR

- **Collector-Emitter Voltage: V_{CEO}=40V**
- **Collector Dissipation: P_C (max)=625mW**

TO-92



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	1000	mA
Collector Dissipation	P_C	625	mW
Junction Temperature	T_J	150	°C
Storage Temperature	Tstg	−55~150	°C

- Refer to MPS6601 for graphs

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ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1mA, I_B=0	40			V
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=100μA, I_E=0	40			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=10μA, I_C=0	4			V
Collector Cut-off Current	I_{CEO}	V_{CE}=30V, I_B=0			100	nA
Collector Cut-off Current	I_{CBO}	V_{CB}=30V, I_E=0			100	nA
DC Durrent Gain	h_{FE}	I_C=100mA, V_{CE}=1V	50			
		I_C=500mA, V_{CE}=1V	50			
		I_C=1000mA, V_{CE}=1V	30			
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=1000mA, I_B=100mA			0.6	V
Current Gain Bandwidth Product	f_T	I_C=50mA, V_{CE}=10V f=30MHz	100			MHz
Output Capacitance	Cob	V_{CB}=10V, I_E=0 f=100KHz			30	pF